

Work Order ID 82884

82884

Page 1

April-10-12 2:38:33 PM

Item ID: D4406-043

Accept

N9000040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Wearplate Assembly

Start Date: 10/04/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/10 Tooling:

Date:

Run Start ***NR1***

QC:

Date: SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4406

B

100

0.00

100

Waterjet

FLOW CNC Waterjet

304.050

Memo

1-Cut as per dwg D4406-3

prog rev: 8

dwg rev: 8

2-Deburr if required

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.00

SCRAP

Scrap
old Rev.

B12-413

8

B12-4-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 82884

April-10-12 2:38:33 PM

82884

Page 2

Item ID: D4406-043
Revision ID:
Item Name: Aft Wearplate Assembly

Accept

N900040100Setup Start ***NS1***Stop ***NS2***

Start Date: 10/04/2012 Start Qty: 8.00
Required Date: 24/04/2012 Req'd Qty: 8.00

8

Cust Item ID:

Customer:

8

Reference:

Approvals: Process Plan: _____ Date: _____
QC: _____ Date: _____

Tooling: _____ Date: _____

SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				(x8)			
130 *130* Small Fab Small Fab	Memo Form as per dwg D4406	0.00 0.00				S			S 12/6ul19
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				(x8)			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Work Order ID 82884***82884***

Page 3

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N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Aft Wearplate Assembly

Start Date: 10/04/2012 Start Qty: 8.00

8

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150		0.00							
150									
Large Fab	Memo	0.00							
Large Fab	Weld bar as per dwg A/R 2059b hardcoat Batch#: _____								
	Weld bar to wearplate as per dwg A/R s.s. rod Batch #: _____								
160	QC10- Inspect visual per QSI004- ground welds	0.00							
160									
QC	Memo	0.00							
Quality Control									
170		0.00							
170									
Small Fab	Memo	0.00							
Small Fab	Apply coating as per dwg D4406								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 82884***82884***

Page 4

April-10-12 2:38:33 PM

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N900040100Setup Start ***NS1***

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Stop ***NS2***

Item Name: Aft Wearplate Assembly

Start Date: 10/04/2012 Start Qty: 8.00

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Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC5- Inspect part completeness to step on W/O	0.00							
180									
QC	Memo	0.00							
Quality Control									
190	Identify as per dwg & Stock Location: _____	0.00							
190									
Packaging	Memo	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

6/12/1207

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

April-10-12 2:38:37 PM

Page 1

Work Order ID: 82884

82884

Parent Item: D4406-043

D4406-043

Parent Item Name: Aft Wearplate Assembly

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP Rev A 11.06.06new issue EC verified by:DD
12.02.06 as per dwg revPBI DD verf:EC

IPP rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S18GA		Purchased	No			100	sf	169.7860	2.92	24.58947			

M304S18GA

304/316 .050 Sheet

**

B12-4-13

Location	Loc Qty	Loc Code
MAT020	158.786	
119032	2.3	
119383	33.486	
119766	3	
120604	120	
MAT20	11	
121192	11	

119383

8

D4407-3

Manufactured No

150 Each

12.0000

2

16

D4407-3

Bar

**

Location	Loc Qty	Loc Code
ENG	-10	
WA	22	
80759	8	
80796	4	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

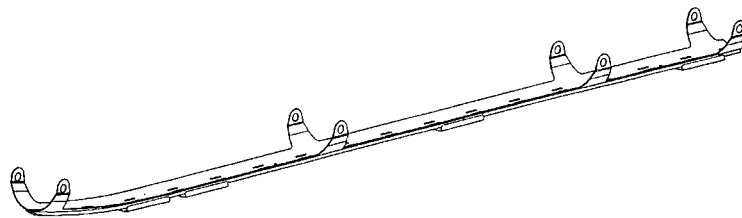
DART AEROSPACE LTD		Work Order:	<i>EZE84</i>
Description: Plate		Part Number:	D4406-3
Inspection Dwg: D4406 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

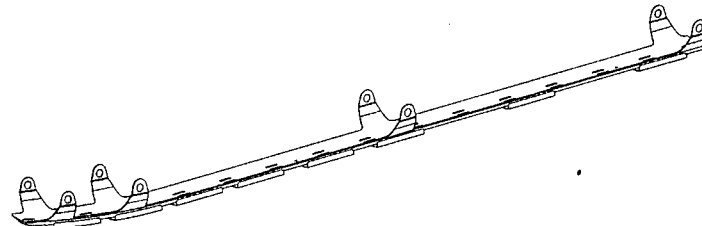
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.561	+/-0.010	0.562	2		V 1862	
0.30	+/-0.030	0.297	2		V	
0.88	+/-0.030	0.88	2		V	
0.13	+/-0.030	0.129	2		V	
0.31	+/-0.030	0.31	2		V	
24.995	+/-0.010	24.995	2		T 1861	
47.958	+/-0.010	47.958	2		T	
54.178	+/-0.010	54.178	2		T	
2.43	+/-0.030	2.421	2		V	
7.77	+/-0.030	7.789	2		V	
7.203	+/-0.010	7.205	2		V	
3.63	+/-0.030	3.636	2		V	
4.00	+/-0.030	4.001	2		V	
7.071	+/-0.010	7.068	2		V	
7.800	+/-0.010	7.793	2		V	
0.050	+/-0.010	0.048	2		V	

Measured by:	<i>RB</i>	Audited by:	<i>S</i>	Preliminary Approval:	
Date:	<i>12-4-13</i>	Date:	<i>12/04/13</i>	Date:	

Rev	Date	Change	Revised by	Approved
A	11.10.13	New Issue P/O D4406-043	KJ	
B	12.03.08	Dimensions revised per Dwg Rev B	KJ <i>[Signature]</i>	<i>[Signature]</i>



D4406-041 FWD WEARPLATE ASSY



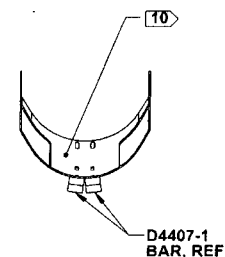
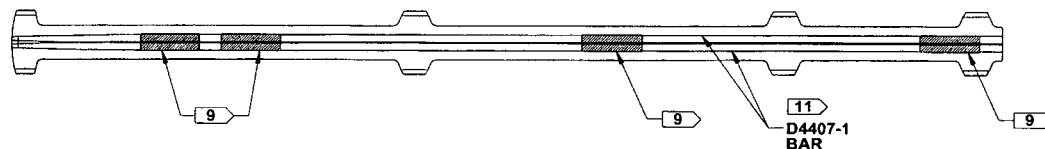
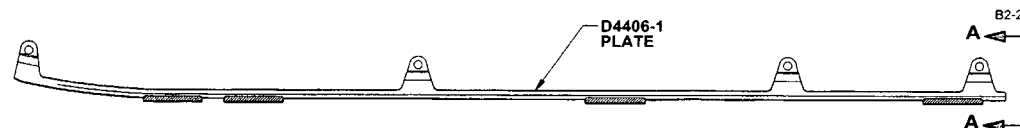
D4406-043 AFT WEARPLATE ASSY

ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
1	X		D4406-041	FWD WEARPLATE ASSY
2		X	D4406-043	AFT WEARPLATE ASSY
3	1		D4406-1	PLATE
4		1	D4406-3	PLATE
5	2		D4407-1	BAR
6		2	D4407-3	BAR
7	A/R	A/R	2059B	HARDCOAT
8	A/R	A/R	4714	PLUS ONE ROCKGUARD (SEE NOTE 10, SHT 2 & 3)

WORK ORDER
 02884 MLCJ
 12/04/10

RELEASE
 2012-02-23

B	REVISE BILL OF MATERIAL; ADD NOTE 13/14 & REVISE NOTE 9 SHT 2 & 3; MODIFY DETAIL E & F (ZN B3-6, C2-6); ADD DETAIL G (ZN C7-6); REVISE D4406-3F TAB LOCATIONS (ZN B5-5)	RF	12.02.16
A	NEW ISSUE	RF	11.08.15
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D4406	SHEET 1 OF 6
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	WEARPLATE ASSY	NTS
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D4406-041 FWD WEARPLATE ASSY

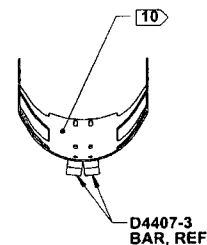
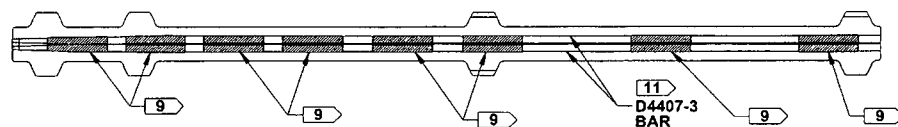
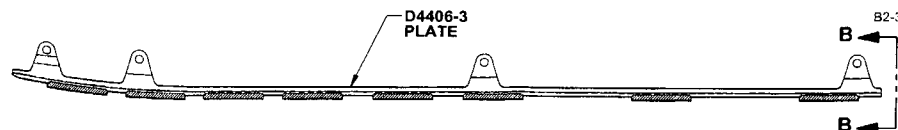
SECTION A-A C3-2
SCALE 2X

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 8.40 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.37 THICK x 0.50 WIDE, FLUSH WITH D4407-1 BAR ON LATERAL SURFACES
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK
- 11) FORM TO MATCH PROFILE OF D4406-1 AT TIME OF WELDING
- 12) TRANSFER Ø0.188 HOLES FROM D4406-1 TO D4407-1
- 13) NOTCH D4407-1 BARS AS REQUIRED TO FORM TO D4406-1 PLATE

RELEASED
2012-02-23
MP

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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	RF	DRAWING NO. D4406	REV. B
MFG. APPR.	RF	SHEET 2 OF 6	
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D4406-043 AFT WEARPLATE ASSY

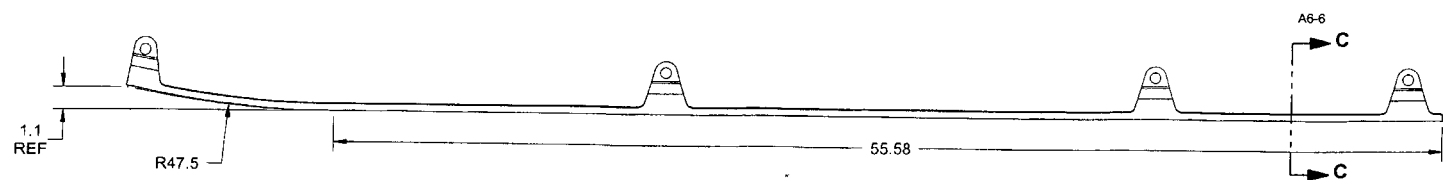
SECTION B-B C3-3
SCALE 2X

RELEASED
2012-02-23
JMS

NOTES:

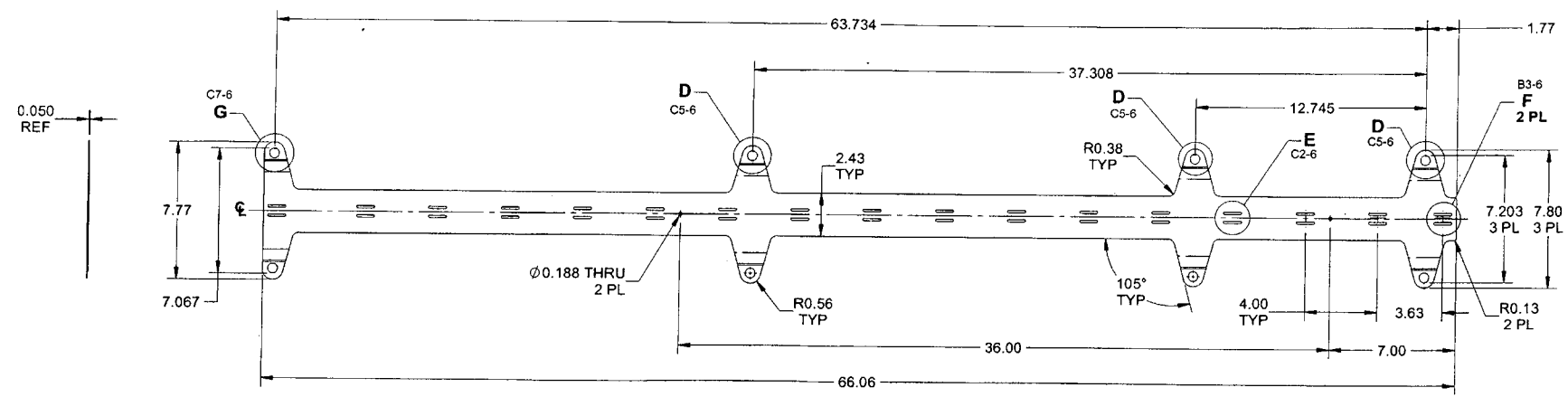
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 8.73 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.37 THICK x 0.50 WIDE, FLUSH WITH D4407-3 BAR ON LATERAL SURFACES
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH A LAYER OF PLUS ONE ROCKGUARD 4714, 0.020-0.040 THICK
- 11) FORM TO MATCH PROFILE OF D4406-3 AT TIME OF WELDING
- 12) FILL TOOLING HOLE WITH WELD ONE PLACE ONLY
- 13) TRANSFER $\varnothing 0.188$ HOLES FROM D4406-3 TO D4407-3
- 14) NOTCH D4407-3 BARS AS REQUIRED TO FORM TO D4406-3 PLATE

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. B
MFG. APPR.	RF	D4406	SHEET 3 OF 6
APPROVED	RF	TITLE	SCALE
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D4406-1 PLATE
(MAKE FROM D4406-1F)

82884



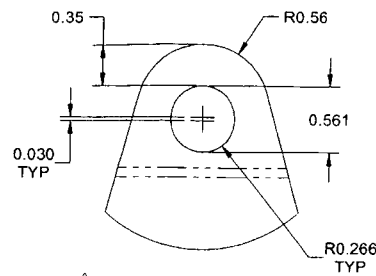
D4406-1F FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 0.050 THICK (18 GAUGE)
PER AMS 5513 OR 5524
OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.7 lbs

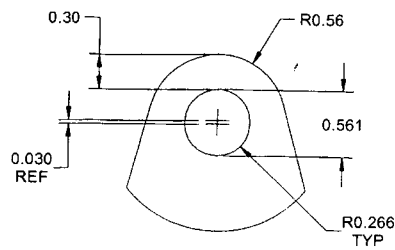
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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4406	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 4 OF 6	
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DATE	12.02.16		



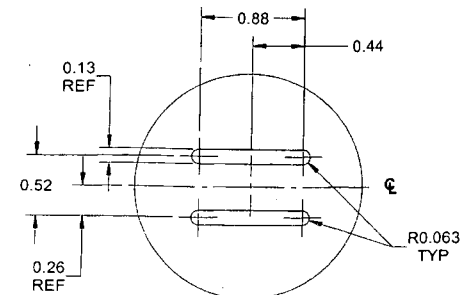
DETAIL G
SLOT DETAIL TYP
SCALE 6X

C7-4
C2-5
C3-5



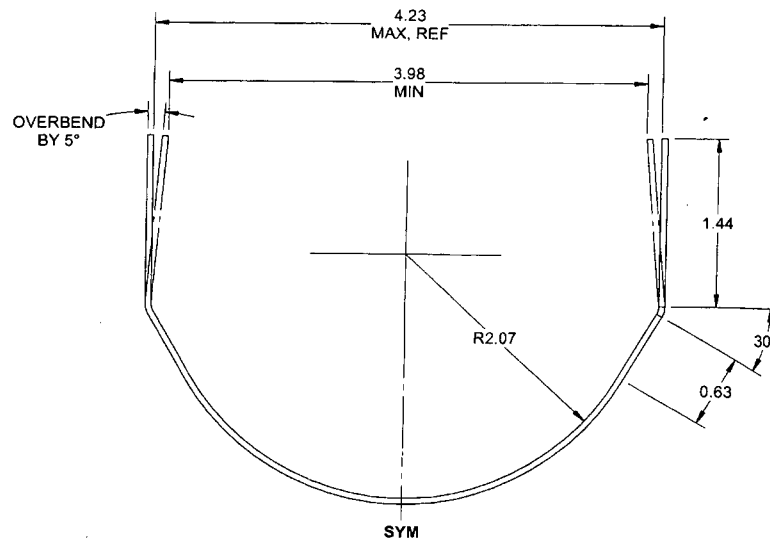
DETAIL D
SLOT DETAIL TYP
SCALE 6X

C2-4
C3-4
C5-4
C5-5
C6-5



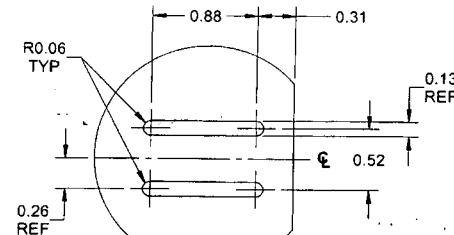
DETAIL E
SLOT DETAIL TYP
SCALE 6X

C2-4
C4-5



DETAIL C
DETAIL TYP
SCALE 6X

D2-4
D6-5



DETAIL F
SLOT DETAIL TYP
SCALE 6X

C1-4
B1-5

RELEASED
2012-02-23

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D4406	SHEET 6 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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